In the Claims:

23.(currently amended): A moving pictures encoding method for encoding a picture frame of an input signal by predicting from both forward and backward picture frames, the picture frame having top and bottom fields, which respectively include odd numbers and even numbers of pixel scanning lines of the picture frame, the method comprising the steps of:

first predicting in a macro-block unit composed of (n x n) pixels, the top field of the picture frame from either one of top and bottom fields of only the forward picture frame, and the bottom field of the picture frame from either one of top and bottom fields of only the backward picture frame;

generating a predictive picture according to the prediction; and

encoding the picture frame of the input signal by using the generated predictive picture.

24.(previously presented): The moving pictures encoding method according to claim 23, further comprising the steps of:

second predicting in the macro-block unit, the top and bottom fields of the picture frame from both the forward and backward picture frames; and

selectively performing the first predicting.

25.(previously presented): The moving pictures encoding method according to claim 24, further comprising the step of detecting if there is a scene change between the top and bottom fields of the picture frame of the input signal; and wherein when the scene change is detected, the first predicting is performed.

26. (currently amended): A moving pictures encoding apparatus, in which a picture frame of an input signal encoded by predicting from both forward and backward picture frames, the picture frame having top and bottom fields, which respectively include odd numbers and even numbers of pixel scanning lines of the picture frame, the moving pictures encoding apparatus comprising:

field motion vector detecting means for performing first predicting in a macro-block unit composed of (n x n) pixels, the top field of the picture frame from either one of top and bottom fields of only the forward picture frame, and the bottom field of the picture frame from either one of top and bottom fields of only the backward picture frame;

motion compensating means for generating a predictive picture according to the prediction; and

encoding means for encoding the picture frame of an input signal using the generated predictive picture.

27.(previously presented): The moving pictures encoding apparatus according to claim 26, further comprising prediction mode selecting means for selecting whether or not

second predicting in the macro-block unit, the top and bottom fields of the picture frame from both the forward and backward picture frames; and

selectively performing the first predicting.

28.(previously presented): The moving pictures encoding apparatus according to claim 27, further comprising a detecting means for detecting if there is a scene change between the top and bottom fields of the picture frame of the input signal; and wherein the field motion vector detecting means performs the first predicting, when the scene change is detected.